requested.

Claims 1-63 are pending and under consideration.

REJECTION UNDER 35 U.S.C. § 102:

In the Office Action, at page 2, claims 1-4, 6-17, 19-22, 24-26, 28, 29, and 38-63 were rejected under 35 U.S.C. § 102 in view of U.S. Patent No. 6, 320,708 to Ueyanagi et al. ("Ueyanagi"). This rejection is traversed and reconsideration is requested.

Ueyanagi generally describes an optical head including a transparent condensing medium 6, a collimator lens 3, an incident surface 6a with a concave form on which the collimated beam 2b enters from a mirror 4, a condensed surface 6b disposed at the position facing the incident surface 6e, a reflecting film 11 deposited and formed on the reflecting surface 6e of the transparent condensing medium 6, and a shading film 7 having a small aperture 7a deposited and formed on the condensed surface 6b of the transparent condensing medium 6. See column 12, lines 1-19. However, Ueyanagi fails to teach or suggest "a first reflecting portion, comprising a negative power," as recited in independent claims 1, 14, and 59. Further, Ueyanagi fails to teach or suggest that "the first reflecting portion is formed around the second transmitting portion," as recited in independent claims 1, 14, and 59. Similarly, Ueyanagi is silent as to providing "a second reflecting portion, comprising a positive power," as recited in independent claims 1, 14, and 59. Instead of providing for "a second transmitting portion transmitting the incident beam, wherein the second transmitting portion is arranged facing the first transmitting portion," as recited in independent claims 1, 14, and 59, Ueyanagi describes a small aperture 7a on a shading film 7. In addition, instead of "transmitting the incident light beam," as recited in independent claims 1, 14, and 59, the small aperture 7a allows a near field wave 10 to leak. See column 12, lines 30-35.

In addition, Ueyanagi describes the reflected beam 2e is reflected by the reflecting film 11 and condensed on the condensed surface 6b to form a beam spot 9 on the condensed surface 6b, and a near field wave 10 leaks from the small aperture 7a. See column 12, lines 17-20. Further, according to Ueyanagi, because the diameter of the small aperture 7a is less than about 0.2 μm, for example, to form the beam spot at the small aperture 7a having a minute aperture precisely, the error of the positioning between the aperture and the beam spot is needed to be at least less than 0.1 μm. See column 12, lines 46-50. However, Ueyanagi fails to teach or suggest the condition that the outer diameter of the second transmitting portion and the

outer diameter of the incident beam on the first reflecting portion meet as recited in independent claim 59. Specifically, Ueyanagi fails to teach or suggest

$$0.1 < \frac{\text{diameter of second transmitting portion}}{\text{outer diameter of light incident on first reflecting portion}} < 0.3$$

as recited in independent claim 59.

Referring to independent claim 38, this claim recites, "wherein the at least one reflecting portion comprises a negative power and the at least one reflecting portion further comprises a positive power," independent claims 42 and 53 recite "a single lens configuration comprising a high numerical aperture to form a high-density, high resolution light spot, a first reflecting portion comprising a negative power, and a second reflecting portion comprising a positive power," and independent claim 48 recites "a single lens configuration shielding a near-axis beam and comprising a numerical aperture of at least 0.8, a first reflecting portion comprising a negative power, and a second reflecting portion comprising a positive power." The Office Action refers to similar portions of the cited references to reject independent claims 38, 42, 48 and 53 as the portions of the cited references previously discussed and distinguished from the claimed features of independent claim 1. The arguments presented above supporting the patentability of independent claim 1 in view of Ueyanagi are incorporated herein to support the patentability of independent claims 38, 42, 48 and 53.

In addition, Ueyanagi describes a collimated laser beam 2b coming to the incident surface 101a of the transparent condensing medium 101 of the optical head, where the incident collimated laser beam 2b which comes to the incident surface 101a is diffused on the incident surface 101a, the diffused beam 2d is reflected on the planar reflecting film 102, **the reflected beam 2e is reflected on the non-spherical reflecting film 103**, the reflected beam is condensed on the condensed plane 101b, and a beam spot 9 is formed on the condensed plane 101b. (Emphasis added) See FIG. 24 of Ueyanagi. The near field wave 10 which leaks from the condensed plane 101b, is served for recording and reading on the recording layer 8a of a recording medium 8. However, Ueyanagi fails to provide "at least one portion converging the diverging light beam to a converging light beam, and a second transmitting portion transmitting only the converging light beam," as recited in independent claim 60. Similarly, Ueyanagi fails to teach or suggest "at least another portion to alter a path of the incident light beam, a second transmitting portion shielding the incident light beam of a near-axis region and transmitting the altered light beam from the at least another portion," as recited in independent claim 62.

In view of the foregoing arguments, it is respectfully requested that independent claims 1,

14, 38, 42, 48, 53, 59, 60, and 62 and related dependent claims be allowed.

In the Office Action, at page 3, claims 32-34 were rejected under 35 U.S.C. § 102 in view of U.S. Patent No. 6, 324,133 to Ichimura ("Ichimura") or U.S. Patent No. 6,339,577 to Hineno ("Hineno"). This rejection is traversed and reconsideration is requested.

Ichimura describes an optical recording and reproducing apparatus where a variation in amplitude caused by the spherical aberration and the variation in the amplitude caused by the focus servo error can be separated by a difference in frequency bands. In an alternative, by making the movement period of the relay lens group longer than the movement period of the object lens, there can be provided an apparatus for accurately detecting the variation in the amplitude caused by the spherical aberration. See columns 11 and 12.

According to Ichimura, when a focus servo is being operated, in order to maximize the amplitude of the RF signal S2, optimization of a distance between the relay lenses 27 and 28 and the two group object lenses and optimization of the focus offset are carried out simultaneously. See column 10, lines 35-67. Further, instead of moving the relay lenses 27 and 28 in FIG. 7, by moving the collimator lens 17, an error signal caused by a spherical aberration produced between the relay lenses 27 and 28 and the two group object lenses is varied and accordingly, the spherical aberration can be minimized. However, Ichimura fails to teach or suggest that the spherical aberration produced between the relay lenses 27 and 28 is "caused by thickness variations of the optical disk," as recited in independent claim 32. Rather, the spherical aberration produces variations in amplitude of lenses. Furthermore, Ichimura fails to teach or suggest that the relay lenses 27 and 28 detect "the thickness of the optical disk," as does the detecting-correcting unit of independent claim 32. Accordingly, Ichimura fails to teach or suggest all the claimed features recited in independent claim 32.

Referring to Hineno, a collimator lens 6 of the optical head device 1 is movable in the direction along the optical axis of the optical head device 1 as shown by an arrow A, to converge a laser beam while correcting the spherical aberration of the laser beam caused by a variation in thickness of a light transmission layer of the optical disk 2, the accuracy of an optical part, and the like. See column 3, lines 18-24. However, Hineno is silent as to providing the collimator lens 6 "arranged on the optical path between the optical path changing unit and the objective lens, detecting the thickness of the optical disk **and** correcting aberration caused by thickness variations of the optical disk," emphasis added, as recited in independent claim 32. Accordingly, Hineno fails to teach or suggest all the claimed features recited in independent claim 32.

In the Office Action, at page 3, claims 36 and 37 were rejected under 35 U.S.C. § 102 in view of U.S. Patent No. 4,433,340 to Mashita et al. ("Mashita"). This rejection is traversed and reconsideration is requested.

Mashita generally describes an organic protection layer 28 that protects a recording layer or a recording layer portion from damage and dust in the outer atmosphere. See column 6, lines 34-47. The organic protection layer 28 may be coated to a thickness of, for example, 1 μm to 10 mm. However, Mashita is silent as to providing that "a thickness error from the incident surface of the information substrate to the recording surface is within ± 5 μm," as recited in independent claim 36. Accordingly, it is requested that independent claim 36 be allowed.

In the Office Action, at page 4, claims 36 and 37 were rejected under 35 U.S.C. § 102 in view of U.S. Patent No. 6,159,572 to Kobayashi et al. ("Kobayashi"). This rejection is traversed and reconsideration is requested.

Kobayashi generally describes an information recording medium including a substrate having a recording surface provided with emboss pits or guiding grooves, a reflective film formed on the recording surface of the substrate, and a first protective film formed on the reflective film. See abstract. However, Kobayashi is silent as to providing that "a thickness error from the incident surface of the information substrate to the recording surface is within ± 5 μm," as recited in independent claim 36. Accordingly, it is requested that independent claim 36 be allowed.

REJECTION UNDER 35 U.S.C. § 103:

In the Office Action, at page 4, claims 14, 20-31, and 35 were rejected under 35 U.S.C. § 103 in view of U.S. Patent No. 6,324,133 to Ichimura ("Ichimura") or U.S. Patent No. 6,339,577 to Hineno ("Hineno") in view of U.S. Patent No. 6,377,535 to Chen et al. ("Chen"). This rejection is traversed and reconsideration is requested.

Dependent claims 20-31 directly or indirectly depend on independent claim 14. The Office Action correctly recognized that Ichimura and Hineno, individually or combined, fail to teach or suggest the claimed features of the objective lens of independent claim 14. Thus, the combination of Ichimura, Hineno, and Chen must provide all the claimed features of independent claim 14.

FIG. 10 of Chen illustrates an optical focusing device 2250 that is generally similar in

function to the optical focusing device 2050 (FIG. 9), and that includes a top surface 2300, a bottom reflective surface 105, a pedestal 110, and a body 115. See column 9, lines 54-57. The top surface 2300 is generally similar to the top surface 2130 (FIG. 9), and includes a central facet 2230 that is positively lensed, for example, with a concave shape, to further complement a peripheral reflector 2132 and to increase the flexibility of the focal spot adjustment. See column 9, lines 57-63. However, Chen fails to teach or suggest that the peripheral reflector 2132 comprises "a negative power, condensing and reflecting the incident beam from the first transmitting portion, wherein the first reflecting portion is formed around the second transmitting portion," as recited in independent claim 14. Rather, Chen limits the optical focusing device 2250 providing the central facet 2230 as positively lensed. Similarly, Chen is silent as to providing "a second reflecting portion, comprising a positive power, condensing and reflecting the incident beam from the first reflecting portion towards the second transmitting portion, wherein the second reflecting portion is formed around the first transmitting portion," as recited in independent claim 14. Accordingly, independent claim 14 and related dependent claims are patentable in view of the prior art of record, individually or combined.

The Office Action refers to similar portions of the cited references to reject independent claim 35 as the portions of the cited references previously discussed and distinguished from the claimed features of independent claim 14. The arguments presented above supporting the patentability of independent claim 14 in view of Ichimura, Hineno, and/or Chen are incorporated herein to support the patentability of independent claim 35.

In the Office Action, at page 5, claims 4-6, 8-10, 17-19, 22-24, and 26-28 were rejected under 35 U.S.C. § 103 in view of Ueyanagi in view of Chen. This rejection is traversed and reconsideration is requested.

Dependent claims 4-6 and 8-10 directly or indirectly depend on independent claim 1. Further, independent claims 17-19, 22-24, and 26-28 directly or indirectly depend on independent claim 14. Thus, the combination of Ueyanagi and Chen must provide all the claimed features of independent claims 1 and 14. Independent claims 1 and 14 were previously distinguished in view of the device provided in Ueyanagi. Accordingly, the arguments presented above supporting the patentability independent claims 1 and 14 in view of Ueyanagi are incorporated herein.

As previously set forth, Chen fails to teach or suggest that the peripheral reflector 2132 comprises "a negative power, condensing and reflecting the incident beam from the first

transmitting portion, wherein the first reflecting portion is formed around the second transmitting portion," as recited in independent claims 1 and 14. Furthermore, Chen is silent as to providing "a second reflecting portion, comprising a positive power, condensing and reflecting the incident beam from the first reflecting portion towards the second transmitting portion, wherein the second reflecting portion is formed around the first transmitting portion," as recited in independent claims 1 and 14.

Accordingly, independent claims 1 and 14 and related dependent claims are patentable in view of Ueyanagi and Chen, individually or combined.

CONCLUSION:

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot, and further, that all pending claims patentably distinguish over the prior art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for allowance, which action is earnestly solicited.

If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for a telephone interview to discuss resolution of such issues.

If there are any underpayments or overpayments of fees associated with the filing of this Amendment, please charge and/or credit the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Please CANCEL claims 37, 40, and 41 without prejudice or disclaimer.

Please AMEND claims 32, 36, 38, 42, 43, 46-48, 51-53, and 57-58. The remaining claims are reprinted, as a convenience to the Examiner, as they presently stand before the U.S. Patent and Trademark Office.

1. (UNAMENDED) An objective lens, comprising:

a first transmitting portion divergently transmitting an incident beam, wherein the first transmitting portion is at a relatively near-axis region from an optical axis of the objective lens;

a second transmitting portion transmitting the incident beam, wherein the second transmitting portion is arranged facing the first transmitting portion;

a first reflecting portion, comprising a negative power, condensing and reflecting the incident beam from the first transmitting portion, wherein the first reflecting portion is formed around the second transmitting portion; and

a second reflecting portion, comprising a positive power, condensing and reflecting the incident beam from the first reflecting portion towards the second transmitting portion, wherein the second reflecting portion is formed around the first transmitting portion.

2. (UNAMENDED) The objective lens of claim 1, wherein a ratio of a diameter of the second transmitting portion to an outer diameter of the incident beam on the first reflecting portion is 0.5 or less, reducing side lobe components of a light spot formed through the second transmitting portion.

3. (UNAMENDED) The objective lens of claim 2, wherein at least one of the first and second reflecting portions further comprise a path difference generating portion generating a separate optical path for at least a portion of the incident beam, reducing the side lobe components of the light spot formed through the second transmitting portion by a difference in paths of a portion of the incident beam on the path difference generating portion and the remainder of the incident beam.

4. (UNAMENDED) The objective lens of claim 3, wherein the path difference generating portion projects from the concave curvature of the second reflecting portion.

5. (UNAMENDED) The objective lens of claim 3, wherein the path difference generating portion recesses into the concave curvature of the second reflecting portion.

6. (UNAMENDED) The objective lens of claim 3, wherein the path difference generating portion is formed in the first reflecting portion.

7. (UNAMENDED) The objective lens of claim 1, wherein at least one of the first and second reflecting portions further comprise a path difference generating portion generating a separate optical path for at least a portion of the incident beam, reducing the side lobe components of the light spot formed through the second transmitting portion by a difference in paths of a portion of the incident beam on the path difference generating portion and the remainder of the incident beam.

8. (UNAMENDED) The objective lens of claim 7, wherein the path difference generating portion projects from the concave curvature of the second reflecting portion.

9. (UNAMENDED) The objective lens of claim 7, wherein the path difference generating portion recesses into the concave curvature of the second reflecting portion.

10. (UNAMENDED) The objective lens of claim 7, wherein the path difference generating portion is formed in the first reflecting portion.

11. (UNAMENDED) The objective lens of claim 1, wherein the first transmitting portion has curvature with a negative power.

12. (UNAMENDED) The objective lens of claim 1, wherein a maximum angle, α, between the optical axis and an outermost ray of the incident beam passed through the second transmitting portion after passing through the first transmitting portion and reflecting on the first and second reflecting portions, satisfies the following condition in the air

$\alpha \geq 36^\circ$.

13. (UNAMENDED) The objective lens of claim 1, wherein the first transmitting

portion has curvature with a negative power.

14. (UNAMENDED) An optical pickup, comprising:

a light source emitting a laser beam;

an optical path changing unit altering a traveling path of an incident beam;

an objective lens, disposed on an optical path between the optical path changing unit and an optical disk, focusing the incident beam from the light source to form a light spot on the optical disk; and

a photodetector receiving the beam reflected from the optical disk and passed through the objective lens and the optical path changing unit,

wherein the objective lens comprises

a first transmitting portion divergently transmitting an incident beam, wherein the first transmitting portion is at a relatively near-axis region from an optical axis of the objective lens;

a second transmitting portion transmitting the incident beam, wherein the second transmitting portion is arranged facing the first transmitting portion;

a first reflecting portion, comprising a negative power, condensing and reflecting the incident beam from the first transmitting portion, wherein the first reflecting portion is formed around the second transmitting portion; and

a second reflecting portion, comprising a positive power, condensing and reflecting the incident beam from the first reflecting portion towards the second transmitting portion, wherein the second reflecting portion is formed around the first transmitting portion.

15. (UNAMENDED) The optical pickup of claim 14, wherein a ratio of a diameter of the second transmitting portion to an outer diameter of the incident beam on the first reflecting portion is 0.5 or less, reducing side lobe components of a light spot formed through the second transmitting portion.

16. (UNAMENDED) The optical pickup of claim 15, wherein at least one of the first and second reflecting portions further comprise a path difference generating portion generating a separate optical path for at least a portion of the incident beam, reducing the side lobe components of the light spot formed through the second transmitting portion by a difference in paths of a portion of the incident beam on the path difference generating portion and the remainder of the incident beam.

17. (UNAMENDED) The optical pickup of claim 16, wherein the path difference generating portion projects from the concave curvature of the second reflecting portion.

18. (UNAMENDED) The optical pickup of claim 16, wherein the path difference generating portion recesses into the concave curvature of the second reflecting portion.

19. (UNAMENDED) The optical pickup of claim 16, wherein the path difference generating portion is formed in the first reflecting portion.

20. (UNAMENDED) The optical pickup of claim 14, wherein a maximum angle, α, between the optical axis and an outermost ray of the incident beam passed through the second transmitting portion after passing through the first transmitting portion and reflecting on the first and second reflecting portions, satisfies the following condition in the air

$\alpha \geq 36^\circ$.

21. (UNAMENDED) The optical pickup of claim 20, wherein at least one of the first and second reflecting portions further comprise a path difference generating portion generating a separate optical path for at least a portion of the incident beam, reducing the side lobe components of the light spot formed through the second transmitting portion by a difference in paths of a portion of the incident beam on the path difference generating portion and the remainder of the incident beam.

22. (UNAMENDED) The optical pickup of claim 21, wherein the path difference generating portion projects from the concave curvature of the second reflecting portion.

23. (UNAMENDED) The optical pickup of claim 21, wherein the path difference generating portion recesses into the concave curvature of the second reflecting portion.

24. (UNAMENDED) The optical pickup of claim 21, wherein the path difference generating portion is formed in the first reflecting portion.

25. (UNAMENDED) The optical pickup of claim 14, wherein at least one of the first

and second reflecting portions further comprise a path difference generating portion generating a separate optical path for at least a portion of the incident beam, reducing the side lobe components of the light spot formed through the second transmitting portion by a difference in paths of a portion of the incident beam on the path difference generating portion and the remainder of the incident beam.

26. (UNAMENDED) The optical pickup of claim 25, wherein the path difference generating portion projects from the concave curvature of the second reflecting portion.

27. (UNAMENDED) The optical pickup of claim 25, wherein the path difference generating portion recesses into the concave curvature of the second reflecting portion.

28. (UNAMENDED) The optical pickup of claim 25, wherein the path difference generating portion is formed in the first reflecting portion.

29. (UNAMENDED) The optical pickup of claim 14, wherein the first transmitting portion has curvature with a negative power.

30. (UNAMENDED) The optical pickup of claim 14, further comprising a detecting-correcting unit, on the optical path between the optical path changing unit and the objective lens, performing at least one of detecting the thickness of the optical disk and correcting aberration caused by thickness variations of the optical disk.

31. (UNAMENDED) The optical pickup of claim 30, wherein the detecting-correcting unit comprises a first lens and a second lens arranged on the optical path, the first lens being closer to the light source than the second lens, wherein the detecting-correcting unit actuates at least one of the first lens and the second lens to perform one of detecting the thickness of the optical disk and correcting aberration caused by thickness variations of the optical disk.

32. (ONCE AMENDED) An optical pickup, comprising:

a light source emitting an incident beam;

an optical path changing unit altering a traveling path of the incident beam;

an objective lens focusing the incident beam from the light source to form a light spot on

the optical disk;

a photodetector receiving the beam reflected from the optical disk and passed through the objective lens and the optical path changing unit; and

a detecting-correcting unit, arranged on the optical path between the optical path changing unit and the objective lens, [performing at least one of] detecting the thickness of the optical disk and correcting aberration caused by thickness variations of the optical disk.

33. (UNAMENDED) The optical pickup of claim 32, wherein the objective lens is disposed on an optical path between the optical path changing unit and the optical disk.

34. (UNAMENDED) The optical pickup of claim 33, wherein the detecting-correcting unit comprises a first lens and a second lens arranged on the optical path, the first lens being closer to the light source than the second lens, wherein the detecting-correcting unit actuates at least one of the first lens and the second lens to perform one of detecting the thickness of the optical disk and correcting aberration caused by thickness variations of the optical disk.

35. (UNAMENDED) The optical pickup of claim 32, wherein the objective lens comprises:

a first transmitting portion divergently transmitting an incident beam, wherein the first transmitting portion is at a relatively near-axis region from an optical axis of the objective lens;

a second transmitting portion transmitting the incident beam, wherein the second transmitting portion is arranged facing the first transmitting portion;

a first reflecting portion, comprising a negative power, condensing and reflecting the incident beam from the first transmitting portion, wherein the first reflecting portion is formed around the second transmitting portion; and

a second reflecting portion, comprising a positive power, condensing and reflecting the incident beam from the first reflecting portion towards the second transmitting portion, wherein the second reflecting portion is formed around the first transmitting portion.

36. (ONCE AMENDED) An optical disk, comprising:

an information substrate, wherein the information substrate comprises

an incident surface receiving light to record and reproduce information; and

a recording surface on which an information signal is recorded and from which at least a

portion of an incident beam is reflected, wherein the thickness from the incident surface of the information substrate to the recording surface is less than 0.1 mm, and a thickness error from the incident surface of the information substrate to the recording surface is within ± 5 μm.

38. (ONCE AMENDED) An objective lens focusing an incident beam from a light source to form a light spot on an optical disk, comprising:

at least one transmitting portion transmitting the incident beam; and

at least one reflecting portion condensing and reflecting the incident beam from the at least one transmitting portion, wherein the at least one reflecting portion comprises a negative power and the at least one reflecting portion further comprises a positive power.

39. (UNAMENDED) The objective lens of claim 38, wherein the at least one transmitting portion comprises a first transmitting portion and a second transmitting portion, wherein the second transmitting portion is arranged facing the first transmitting portion.

42. (ONCE AMENDED) An objective lens, comprising:

a single lens configuration comprising a high numerical aperture to form a high-density, high resolution light spot, a first reflecting portion comprising a negative power, and a second reflecting portion comprising a positive power.

43. (ONCE AMENDED) The objective lens of claim 42, wherein [the wherein] the numerical aperture comprises at least 0.8.

44. (UNAMENDED) The objective lens of claim 42, wherein the single lens configuration comprises a first transmitting portion divergently transmitting an incident beam, wherein the first transmitting portion is at a relative near-axis region from an optical axis of the objective lens.

45. (UNAMENDED) The objective lens of claim 44, wherein the single lens configuration further comprises a second transmitting portion transmitting the incident beam, wherein the second transmitting portion is arranged facing the first transmitting portion.

46. (ONCE AMENDED) The objective lens of claim 45, [wherein the single lens

configuration further comprises a first reflecting portion, comprising a negative power, condensing and reflecting] wherein the first reflecting portion condenses and reflects the incident beam from the first transmitting portion[, wherein the first reflecting portion] and is formed around the second transmitting portion.

47. (ONCE AMENDED) The objective lens of claim 46, [wherein the single lens configuration further comprises a second reflecting portion, comprising a positive power, condensing and reflecting] wherein the second reflecting portion condenses and reflects the incident beam from the first reflecting portion towards the second transmitting portion[, wherein the second reflecting portion] and is formed around the first ~~second~~ transmitting portion.

48. (ONCE AMENDED) An objective lens, comprising:

a single lens configuration shielding a near-axis beam and comprising a numerical aperture of at least 0.8, a first reflecting portion comprising a negative power, and a second reflecting portion comprising a positive power.

51. (ONCE AMENDED) The objective lens of claim 50, [wherein the single lens configuration further comprises a first reflecting portion, comprising a negative power, condensing and reflecting] wherein the first reflecting portion condenses and reflects the incident beam from the first transmitting portion[, wherein the first reflecting portion] and is formed around the second transmitting portion.

52. (ONCE AMENDED) The objective lens of claim 51, [wherein the single lens configuration further comprises a second reflecting portion, comprising a positive power, condensing and reflecting] wherein the second reflecting portion condenses and reflects the incident beam from the first reflecting portion towards the second transmitting portion[, wherein the second reflecting portion] and is formed around the second transmitting portion.

53. (ONCE AMENDED) An optical pickup, comprising:

an objective lens comprising a single lens configuration, the single lens configuration comprising a high numerical aperture to form a high-density, high resolution light spot, a first reflecting portion comprising a negative power, and a second reflecting portion comprising a positive power.

54. (UNAMENDED) The optical pickup of claim 53, wherein the numerical aperture comprises at least 0.8.

55. (UNAMENDED) The optical pickup of claim 53, wherein the single lens configuration comprises a first transmitting portion divergently transmitting an incident beam, wherein the first transmitting portion is at a relative near-axis region from an optical axis of the objective lens.

56. (UNAMENDED) The optical pickup of claim 55, wherein the single lens configuration further comprises a second transmitting portion transmitting the incident beam, wherein the second transmitting portion is arranged facing the first transmitting portion.

57. (ONCE AMENDED) The optical pickup of claim 56, [wherein the single lens configuration further comprises a first reflecting portion, comprising a negative power, condensing and reflecting] <u>wherein the first reflecting portion condenses and reflects</u> the incident beam from the first transmitting portion[, wherein the first reflecting portion] <u>and</u> is formed around the second transmitting portion.

58. (ONCE AMENDED) The optical pickup of claim 57, [wherein the single lens configuration further comprises a second reflecting portion, comprising a positive power, condensing and reflecting] <u>wherein the second reflecting portion condenses and reflects</u> the incident beam from the first reflecting portion towards the second transmitting portion[, wherein the second reflecting portion] <u>and</u> is formed around the second transmitting portion.

59. (UNAMENDED) An objective lens, comprising:

a first transmitting portion divergently transmitting an incident beam, wherein the first transmitting portion is at a relatively near-axis region from an optical axis of the objective lens;

a second transmitting portion transmitting the incident beam, wherein the second transmitting portion is arranged facing the first transmitting portion;

a first reflecting portion, comprising a negative power, condensing and reflecting the incident beam from the first transmitting portion, wherein the first reflecting portion is formed around the second transmitting portion; and

a second reflecting portion, comprising a positive power, condensing and reflecting the incident beam from the first reflecting portion towards the second transmitting portion, wherein the second reflecting portion is formed around the first transmitting portion,

wherein the objective lens forms a small light spot to reproduce information from an optical disk when a ratio of an outer diameter of the second transmitting portion to an outer diameter of the incident beam on the first reflecting portion is 0.5 or less or, when the outer diameter of the second transmitting portion and the outer diameter of the incident beam on the first reflecting portion satisfy the following condition

$$0.1 < \frac{\text{diameter of second transmitting portion}}{\text{outer diameter of light incident on first reflecting portion}} < 0.3$$

60. (UNAMENDED) An optical pickup comprising:

an objective lens comprising:

a first transmitting portion divergently transmitting an incident light beam,

at least one portion converging the diverging light beam to a converging light beam, and

a second transmitting portion transmitting only the converging light beam.

61. (UNAMENDED) The optical pickup of claim 60, wherein the second transmitting portion is opposite to the first transmitting portion on the objective lens and an optical axis of the objective lens passes through the first and second transmitting portions.

62. (UNAMENDED) An optical pickup comprising:

an objective lens comprising:

a first transmitting portion transmitting an incident light beam,

at least another portion to alter a path of the incident light beam,

a second transmitting portion shielding the incident light beam of a near-axis region and transmitting the altered light beam from the at least another portion.

63. (UNAMENDED) The optical pickup of claim 62, wherein the second transmitting portion is opposite to the first transmitting portion on the objective lens and an optical axis of the objective lens passes through the first and second transmitting portions.